

Module 6: Communication

Learning Objectives

Upon completion of this module, nurses will be able to:

- Differentiate between specific communication impairments
- Understand how communication is affected in a stroke survivor
- Identify and use methods to support communication
- Understand the nurse's role to help with communication
- Recognize the impact communication problems can have on a stroke survivor and their family
- Identify the resources available to support their learning

Please refer to the following content when reading this module:

1. Canadian Stroke Best Practice Recommendations, Rehabilitation and Recovery Following Stroke, [*Section 10 Language and Communication*](#)
2. Taking Action for Optimal Community and Long-Term Stroke Care: A Resource for Healthcare Providers Chapter 6 – Activities and Participation: [*Section 6.1 Communication*](#)
3. An Introduction to Supported Conversation for Adults with Aphasia (SCA™) [*Online Self-directed Learning Module*](#) and [*pictographs*](#)





Communication involves the exchange of ideas through speech, language, gestures, visuals (pictures, maps, calendars) or reading/writing. Communication is a basic human need, helping people stay connected to each other. Clear communication is also central to getting needs met (Heart and Stroke Foundation [HSF], 2020).

Through language we communicate inner thoughts, desires, intentions and motivations. We understand what others say to us and are able to ask questions, give commands, comment and interact ([American Heart Association \[AHA\] & American Stroke Association \[ASA\], 2018](#)).

Language centres are located in the left frontotemporal-parietal lobe for right-handed individuals and many left-handed individuals. Stroke survivors who have an infarct in the left side of their brain are at more risk for developing aphasia. Difficulties with motor control and motor planning, as experienced in dysarthria and apraxia, result from damage to other areas of the brain. These include either side of the brain or the brainstem.

- A recent report based on data from the Ontario Stroke Audit estimated that 35% of individuals with stroke have symptoms of aphasia at the time of discharge from acute care (Dickey et al., 2010).
- The presence of aphasia has been associated with general decreased response to stroke rehabilitation interventions and an increased risk for mortality. Aphasia is associated with increased lengths of hospital stay, poorer outcomes in terms of activities of daily living and mobility, and discharge to long-term care.
- Aggressive management of aphasia helps improve both language and broader recovery.
- Aphasia has been demonstrated to have a negative impact on quality of life, mood and social outcomes. (Teasell, Salbach, Foley et al. 2020)

Types of Communication Disorders

It is important to know that with each communication disorder described below, the patient may have more difficulty when feeling tired, upset, under stress or ill. Generally speaking, the patient with a communication disorder KNOWS MORE THAN THEY CAN SAY. It is a loss of language, not intellect.

We want to capitalize on the patient's communication strengths and give the patient strategies to participate fully in life and in decisions that are made.

Aphasia

Aphasia is the impairment of language resulting from damage to the language-relevant areas of the frontal, temporal and parietal lobes of the brain (more often left vs. right hemisphere). Aphasia can result in difficulty understanding spoken and/or written language and/or difficulty producing spoken and/or written language. Problems with word retrieval can be common for any patient with aphasia. The patient with aphasia may produce a sound error (for example, "sair" for chair), use a word from the same category in error (for example, "table" for chair) or a nonsense word (for example, "splink" for chair.)

There are several different types of aphasia. The following describe the most common:

Broca's aphasia (also known as expressive or non-fluent aphasia)

- This may occur when a stroke affects the left posterior inferior frontal area.
- The patient may have difficulty expressing thoughts and intentions. The patient knows what they want to say but the words don't come out right and the patient can have great difficulty forming complete sentences. The patient may get out some basic words but leave out words like "is" or "the".
- Spontaneous or automatic speech (for example, "How are you?") may be better than planned speech or than responses to what other people say.
- The patient's speech may be 'non-fluent' or halting in nature.
- The patient may make mistakes in following directions like "left, right, before and after."
- The stroke can also affect written communication. Difficulties with written language may be similar to those observed with spoken language.

Wernicke's aphasia (also known as receptive or fluent aphasia)

- This may occur when a stroke affects the left temporoparietal lobe.
- Damage to this area can result in mild to significant challenges understanding spoken and/or written language (for example, medication information, daily menus). It means a patient may have trouble processing the messages of others.
- The patient's speech may be 'fluent' in nature (produced without apparent difficulty) but the message that is conveyed may not make sense to the listener. The patient may say words or sentences that don't make sense, stringing together a series of meaningless words that sound like a sentence (for example, "The green grass sleeps furiously").
The patient may fail to realize they are saying the wrong words, and word sequences, and may think that you have a problem.

Global aphasia

- This may result when a stroke affects an extensive portion of the left hemisphere.
- The challenges that are seen are a combination of both Broca's aphasia and Wernicke's aphasia. The patient has significant problems speaking and writing as well as understanding spoken and written language.
- There is almost total reduction of all aspects of spoken and written language, in expression and comprehension.
- The patient's strengths may include the ability to follow the melody of sentences (i.e., the patient may realize if someone is asking a question or expressing anger).

(Southwestern Ontario Stroke Network [SWOSN], 2018; AHA and ASA, 2018)

Cognitive-communication impairments

- These may occur when the patient experiences a severe stroke or multiple strokes in either hemisphere
- The patient may have difficulty with the following:
 - organizing thoughts
 - concentrating (also called attending)
 - remembering
 - understanding nonverbal communication, humour, sarcasm, hints or jokes
 - finding words (word retrieval)
- The patient may speak well but may have difficulty getting to the point of the conversation or wandering off topic. The patient may not provide all relevant information on a topic.
- The patient may even appear rude and may make little eye contact due to neglect. Refer to *Module 7 Cognition, Perception and Vision* for further information.
- The patient may have trouble understanding or remembering what they read.

(HSF, 2020)

Dysarthria

- Dysarthria is a condition resulting from damage to motor areas in the frontal and parietal lobes.
- It can result from weakness, problems with timing (for example, slowness) and/or poor coordination of the muscles used for speaking.
- The patient with dysarthria alone can understand spoken language, use spoken language using appropriate words and sentences, read, write, think, plan, decide and reason. The patient is able to use computers or other devices to communicate (HSF 2020).
- The deficits are in producing speech and therefore the patient can be difficult for others to understand. Deficits may include:
 - slurred speech/difficulty producing specific speech sounds (which can include omission or distortion of sounds, especially consonants)
 - poor breath support for speech (which can affect the number of words the patient can say in one breath; for example, “My name” pause for a breath “is John”.)
 - weakness or paralysis of the vocal cords (affecting the quality of the voice and cause varying degrees of hoarseness or roughness)
 - changes in vocal quality (nasal or stuffy sounding)
 - altered rate or rhythm of speech (the patient may speak too slowly, too quickly, or both)
 - problems varying pitch or loudness (resulting in a monotonous sounding voice or unusual or irregular variations)

Apraxia

- It may also be called “verbal apraxia” and occurs with damage in multiple areas including right inferior frontal, temporal lobes and basal ganglia. It can often occur with an aphasia.
- Apraxia is difficulty executing the movements for speech. There is a disconnect between the brain’s intention and what is produced. Unlike dysarthria, the patient’s problems are not due to muscle weakness.
- Apraxia may present in the following ways:
 - mispronouncing words
 - transposing sounds in a word (e.g., “kitchen” for “chicken”)
 - producing multiple attempts at a word
 - groping behaviour of the mouth as the patient attempts to produce the intended word
 - worsening under conditions of stress or fatigue

It is imperative for nurses to know where in the brain the patient's stroke occurred to better understand the type of communication deficit. This can help the nurse to develop a communication partnership with the patient. It is also important to determine the degree and type of the communication deficit. Some patients may experience only mild deficits while others may have severe problems with communication.



The nurse should carefully observe the patient to assess what the patient actually understands. Under-estimating the patient's abilities can lead to the patient feeling increased frustration or anger. Over-estimating the patient's abilities can lead one to believe the patient is being deliberately uncooperative (HSF, 2020).

Liaising with the *Speech-Language Pathologist* regarding the diagnosis and the most effective strategies for each individual can make communication more successful and rewarding for both the patient and the nurse.

Being more familiar with a patient's likes, dislikes, concerns, interests, and fears may help a nurse to understand the direction of the patient's conversation. Other important questions include the following:

- Does the patient wear glasses?
- Does the patient use hearing aids or an amplifier?
- Do the hearing aids need repair or are they working?
- Does the patient need an audiology assessment?
- Does the patient have and use dentures? Do the dentures fit?

All of these can affect the patient's ability to better communicate.

Other considerations

- Some patients can lose the ability to speak because of aphasia, but not the ability to write or print. However, some may lose both the ability to speak and write.
- Some patients with aphasia no longer understand what is being said to them. Or, they may understand when spoken to in one language (for example, the first language they learned) but not in another language that they previously knew how to speak.
- Some patients with aphasia may be able to understand when people speak to them but are unable to read. This may come as a shock when the patient tries to read a menu, a magazine, a text or written instructions the health care team provides.
- Some patients with aphasia have difficulty understanding what people say to them, but may be able to understand when the same information is written in simple terms.

It is important to remember that a stroke survivor can retain many of the cognitive and social skills that they had prior to the stroke. However, these skills may be hidden or masked by the language disorder. So, a survivor may appear to be less competent, and as a result, may be treated as though they are less competent. This can result in decreased participation in all aspects of social and community life, with potentially devastating consequences to self-esteem and quality of life.

(Klippenstein, 2011)



The Canadian Stroke Best Practice Recommendations (Teasell et al., 2020, section 10ix) states: All healthcare providers working with persons with stroke across the continuum of care should be trained about aphasia, including the recognition of the impact of aphasia and methods to support communication.

All information intended for patient use should be available in aphasia-friendly formats (e.g., patient education material should be available in audio/visual format). This includes materials such as educational information, consent forms and information regarding participation in stroke rehabilitation research, and assessment tools.

Communication Strategies

The type of communication impairment determines which strategies can help with communication.

Consult with a *Speech-Language Pathologist* regarding strategies and techniques to improve communication including technologies and Supported Conversation for Adults with Aphasia (SCA™).

Communicating with a patient with aphasia

The role of the communication partner with a patient with aphasia is to help the patient demonstrate communication strengths. More specifically, we want to:

Help the patient get a message in (understand)

Help the patient get a message out (communicate)

Clarify that the patient's message has been understood.

Materials to Have on Hand

Blank white paper (for both you and the patient to use for printing or drawing)

Medium black marker for you to use when printing or drawing

Pencil with or without an adaptive grip (for the patient to use when printing or drawing)

Sheet with pictured options of "Yes", "No", "I don't know"

Pictures or pictographic illustrations

Other materials that the speech-language pathologist suggests (for example, a family tree, a calendar, an alphabet board, a communication book, Life Story Book)

Suggestions Before Beginning

Enjoy the patient, the patient will sense your genuine interest and patience. Be natural, value the patient and the patient's attempts to share information. A patient with aphasia who has more severe challenges getting information in or out will benefit from you using more strategies. Avoid using technical language. Recognize that communication breakdowns will occur, especially when either the patient or you are tired, distracted or very busy. Be honest. Let the patient know when you are not your best. ("I didn't get much sleep last night. I'm not as good a listener or communication partner today.")

Feel free to ask the *Speech-Language Pathologist* working with the patient what may best help that patient. If you have time, you may ask whether the two of you could see the patient together for a few minutes.

Communicate about important issues when the patient is rested, as fatigue makes communication harder or even impossible.

The following are strategies to help get the message IN:

- Look at the patient
- Speak slowly
- Use facial expressions, body language, gestures and visual cues
- Use a lot of intonation in your voice while maintaining normal volume
- Use short, simple sentences
- Communicate one idea at a time
- Introduce the topic of conversation and signal a change in topic clearly
- Ask yes/no questions
- Ask "closed ended" questions, providing specific choices (e.g., "Do you want orange juice or apple juice?")
- Break down instructions into small steps and give one instruction at a time
- Repeat and/or rephrase information if it is not understood
- Print key words, draw pictures or use an app
- Point to objects related to the message

The following are strategies to help the patient get the message OUT:

- Give the patient time. Let them know you are interested in what they want to share
- Ensure the accuracy of yes/no responses before you ask these types of questions (e.g., "Is your last name Jones? Is it (real last name)? Is it Smith?").
Ask yes/no questions ("Are you ready for your pills?")
Ensure the patient has a way to communicate yes/no/I don't know by:
 - saying "yes", "no", "I don't know"
 - nodding or shaking their head or lifting their shoulders
 - gesturing (thumb up or thumb down)
 - pointing to the words (have the sheet with pictured options available)
- Ask one question at a time
- Ask questions in such a way that you go from more general questions to more specific questions. (e.g., "Do you want me to call someone? Do you want me to call one of your daughters? Do you want me to call Susan?")
- Ask questions that allow the patient to choose between two responses
- Encourage the patient to gesture, point to objects/pictures, draw or print key words
- Give the patient enough time to respond
- Attempt to identify the general topic first and then move on to understanding the details, expanding on what you think they might be trying to say
- Make use of communication devices, smart phones and apps that "speak" for the stroke survivor to enhance their communication (as recommended by the Speech- Language Pathologist)

(HSF, 2020; Sloan, n.d.; Klippenstein, 2011)

Clarify that the patient's message has been UNDERSTOOD:

Clarifying/Verifying the patient's message helps the patient to feel understood and valued.

- Summarize what you have understood by speaking slowly and clearly, using a phrase such as "So I want to make sure I got it. Please correct me."
- Add gestures or print key words
- Repeat the patient's message
- Elaborate on what you think the patient may be trying to say
- Recap the conversation if it was a long one.

Training in Supported Conversation for Adults with Aphasia (SCA™) is recommended for all healthcare providers working with stroke survivors.

FREE: [Introduction to SCA™ eLearning Module](#)

Communicating with a patient who has cognitive communication impairments

- Communicate about important issues when the patient is rested, as fatigue makes communication harder or even impossible.
- Get the patient's attention- you may need to stay on their right side (because of neglect)
- Maintain eye contact
- Ask specific questions
- Remind the patient of the topic being discussed as needed
- Provide large, clear print, keeping information short and direct
- Use pictures and photographs (including smart phone and tablet apps)
- Avoid humour, sarcasm, hints and other indirect ways of communicating
- Say exactly what is meant
- Remember, if you perceive the patient is being rude, this is not on purpose; tell the patient how you feel about this behaviour and what would work better

(HSF, 2020)

Communicating with a patient with dysarthria

- Communicate about important issues when the patient is rested, as fatigue makes communication harder or even impossible
- Choose a quiet place
- Speak slowly and in a normal voice and tone to encourage the patient to speak slowly
- Ask the patient to speak more slowly
- Repeat what you have understood and ask for clarification for what you have not understood
- Take notes to make it easier to keep track of the conversation

- Provide writing materials (e.g., pen and paper) as it may be easier for the patient to write than talk
- Use a communication board with pictures, words or phrases to make it easier to communicate basic needs
- Use an alphabet board and have the patient point to or look at the letters to communicate if appropriate, and write the words as the survivor spells them
- Use other technologies for assisting with communication (i.e., communication devices or applications on smart phones or tablets)

(HSF, 2020)

Other conditions affecting communication and strategies to help

- Language barriers - Use pictures and gestures to aid communication. Official interpreters or family members may be used to translate.
- Premorbid education level and literacy may affect abilities.
- Hearing loss - Talk face -to-face in a quiet room with good lighting. Ensure any bright light is on you and not in the patient's eyes as being able to see your lips and your face will give the patient needed information. If the patient uses hearing aids, make sure they are working. Amplification devices may be available (consult with the Speech- Language Pathologist). Ask the patient if they can hear you. Ask questions so you know that your messages have been heard accurately. Provide written information if they cannot hear what you are saying.
- Visual impairments - Urge the patient to wear their glasses if they are needed. Ensure the lighting is not too bright or too dark. If the patient has a visual field loss, move yourself and any materials so they are easily seen in the remaining visual field. Written material may have to be larger print.
- Emotional lability - The emotional reaction may differ from how the stroke survivor really feels. Refer to Module 10 Mood and Behaviour Changes for further information.
- Fatigue - Ensure adequate rest as fatigue can make communication more difficult.

(HSF, 2020)

Despite best efforts, there will be times when communication breaks down; it is valid and comforting to acknowledge frustration. Always include the patient in any conversations that concern them. **Don't talk about them - talk to them.** Celebrate success.

(HSF, 2020; AHA & ASA, 2018)

Teaching the stroke survivor independent communication

The nurse needs to teach the patient and family how to self-manage the significant impact of communication deficits following a stroke. It is important for the nurse to assess the patient's self-efficacy and further promote it.

The nurse can provide the following tips to the stroke survivor to help support independent communication:

- Take your time. Your ideas are important.
- Let your partner know that you need time to convey your thoughts
- Let your partner know when you want help
- Let your partner know not to interrupt you
- Ask your partner to slow down or repeat when necessary
- Do whatever you need to in order to get your message across:
 - point or gesture
 - draw
 - print words
 - point to pictures
 - use apps
 - answer "yes" or "no"
- Go out and interact with people; being with people and communicating with others is important to your recovery
- Be patient and kind with yourself
- If you like, use a [business card explaining your impairment](#), which can be given to another person to help them understand your communication strengths and challenges
- Computers and smart phones have [apps to help with aphasia](#).
- Never give up trying to communicate

(Klippenstein, 2011; AHA & ASA, 2018)

Further training and support groups

It is important for family members and close friends to make use of the strategies needed for their loved one and to understand and express themselves. The nurse should recommend [Supported Conversation for Adults with Aphasia training](#) to the family, close friends or caregivers, and other [Aphasia Resources](#).

Persons with aphasia may also wish to continue their recovery through aphasia or [stroke support groups](#), which may be available in the community. Meeting people who are struggling with the same challenges and sharing ideas and stories can be helpful (HSF, 2018).



When communicating with a stroke survivor, what were some strategies that worked? How did you feel?

After reviewing this module, can you think of any new strategies to try?

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